

July is For Annual Vines, Spiked Speedwell and Dragonflies





2022 is the Year of the Verbena

Floriferous verbenas sport clusters of densely packed flowers in a myriad of shades from white to pastels to fiery red and almost fluorescent purple. Once established, most verbena cultivars are quite heat tolerant. Regular dead-heading keeps more blossoms coming throughout the growing season. Verbenas do best in full to partial sun and when kept moist but not overly wet. Use them as bedding plants or in containers and fertilize with a half strength liquid feed about every two weeks. <u>https://ngb.org/year-of-the-verbena/</u>



Samira Red with Eye from Benary - Year of the Verbena - National Garden Bureau

Annual Vines



There are many annual vines commonly available at garden centers including the popular *Ipomoea species* of morning glory including the cardinal vine *I. slateri*, Mandevilla, *Thunbergia alata* and even gourds. Many will attract hummingbirds and have profuse flowering potential. Seeds can be saved from the cardinal vine and stated the next spring. Shown above left *T. alata* 'Tangerine Slice', and on right, *Mandevilla* spp. vine.

Annual Flowering Vines

Spiked Speedwell Veronica Spicata



Speedwell is an herbaceous perennial that is easy to grow. It prefers moist but well-drained soil in full sun. Blooms begin in late spring and will continue into fall if dead-headed or sheared. There are many cultivars/varieties that come in various colors and heights. They are a great addition to pollinator and butterfly gardens.

Veronica spicata

Dragonflies



Female calico pennant dragonfly on wild blueberry

Gompus spp. clubtail

Dragonflies are from the insect order Odonata which also includes the damselflies. Dragonflies are predaceous as aquatic nymphs and as adults, consuming large quantities of both mosquito larvae and adults. They are also predators of other creatures including other insects. They are among the fastest insect fliers in the world.

New England Dragonfly Images

UConn Bug Week



UConn is having several events this year during its annual Bug Week the third week of July. There will be activities on July 19 at the Spring Valley Farm, bug walks and live insects including native walking sticks on display July 20 at the Middlesex County Cooperative Extension Office in Haddam, and insect parasites activities on campus UConn presented by the UConn Museum of Natural History. See website on link below for more information and online activities. Registration for Haddam is not required, drop- ins welcome that day, and the rain date is July 21.

UConn Bug Week 2022

Pest Highlight -Tobacco Budworms



Caterpillars of the tobacco budworm, *Heliothus virescens*, are often pests on tobacco family plants like *Nicotiana*, petunia, *Calibrachoa* plus geraniums (especially red), snapdragons. And other plants. If these plants have chewing damage to petals, check inside the flowers for the caterpillars. They have a strong preference for reproductive parts of flowers plus the petals. If any of the above plants seem to have stopped flowering, scout for budworms. They often change color to match that of the flowers they are feeding on.

Tobacco Budworms

Pest Highlight- Fall Webworms



The Fall webworm caterpillar, *Hyphantria cunea*, is a caterpillar pest native to North America that can cause serious defoliation to deciduous trees and shrubs from late June to fall. Caterpillars spin large silk tents at the tips of branches, and they feed inside the tent on foliage enclosed with the silk. As they eat the leaves, they will continue down the same branch, increasing the tent size as they go. Tents can be brushed off the plant, if reachable, and the caterpillars can be put in a bucket of soapy water to kill them. Or cut off branch and throw tent in trash or destroy it.

Fall Webworms

Disease Highlight - Tomato Spotted Wilt Virus



Ward Upham, Kansas State University, Bugwood.org

Edward Sikora, Auburn University, Bugwood.org



William M. Brown Jr., Bugwood.org

Tomato spotted wilt virus affects tomatoes as well as many other crops and weeds, which makes it all the more concerning to commercial and home gardeners. To make this more challenging, exact symptoms vary from plant to plant. Unlike abiotic diseases, plants affected by a virus have a more localized presentation. A small cluster of plants could show signs of the presence of the virus without affecting plants located in close proximity. Signs can include stunted growth, yellow or dead spots on the leaves, ring spots, wilting of leaves, circular lesions on the leaves. Without proper clinical analysis, the disease is difficult to diagnose simply because the symptoms are ambiguous.

Transmission of the TSWV is by thrips, most notably the western flower thrips. Immature thrips acquire the virus by eating affected plants then, as they get older, carry the virus as a vector by wind to various host plants.

Strategies to control the virus is by controlling thrips, which can be difficult.

1. Monitor for the presence of thrips. Using monitor cards can help know whether thrips are present. If present, then it's important to control thrips.

- 2. **Control weeds.** Thrips like to live in weeds. Many weeds can harbor TSWV. Keep weeds under control to help reduce thrips population and potential alternate hosts of the virus.
- 3. **Select** TSWV resistant varieties when purchasing seeds.

If you suspect your tomato may have TSWV or you see yellow or dead spots on your tomato leaves, ring spots or swirling patterns on your tomatoes, please contact the UConn Home and Garden Education Center.

Animal Highlight- Eastern Box Turtle



Eastern box turtles, Terrapene caroliana, is one of eight turtle species found in Connecticut. Easily recognized by its hinged plastron and high- domed ornately marked carapace, this turtle is a species of special concern in Connecticut. They are omnivores and will eat a variety of arthropods, very small animals like frogs, plants and fungi.

Eastern Box Turtle

UConn's EEB Greenhouse- See Exotic Plants from Around the World



Alluaudia ascendens from Madagascar

Solanum ensifolium flowers

The EEB Greenhouse at the rear of the Torrey Life Science Building on the UConn Campus on North Eagleville Road contains one of the most diverse teaching plant collections in the US. Visitors can see two *Alluaudia* genus of tall succulents native to Madagascar that have leaves that grow directly out of the trunk with sharp spines scattered among them. Cacoa, kola nut and acacia, limeberry, vanilla orchids and many other exotic plants are also featured. There is also *Solanum ensifolium,* of which the only two plants known to exist in the world in 2018 were in this UConn live collection.

EEB Greenhouse- Torrey Life Science Building

Things to do/events



UConn Bug Week- programs for adults and children the July 19-23

<u>Connecticut Trail Finder</u>- Connecticut Trail Finder is a new resource for those looking to explore the Nutmeg State's 2,000 miles of trails.

<u>James L. Goodwin State Forest-</u> trail maps are available on-line. Contact them for any upcoming guided tours and other events

<u>Connecticut College Arboretum-</u> there are several trails, including a native plant collection featuring spring wildflowers and the Nancy Moss Native Azalea Collection

<u>UConn Summer Riding Programs-</u> check out programs for all levels of riders, beginner to advanced, offered this summer

Ten Gardening Tips for July

- 1. Cut back mums, tall asters, Montauk daisies and helianthus by about one-quarter for bushy, more floriferous plants.
- 2. Water early in the morning to reduce the loss of water to evaporation during the hottest days. Recheck smaller containers on hot days as well in case more water is needed.
- 3. Check out the <u>UConn Extension Bug Week</u>, July 17-23, 2022 for events, activities, and programs.
- Tomato hornworms are large green caterpillars that feed on the leaves of <u>tomatoes</u> and related plants. Hand-pick or control with <u>Bacillus thuringiensis</u>. Do not remove caterpillars that are covered in white pupae as they have been parasitized by beneficial wasps.
- 5. <u>Cucumbers</u> are heavy drinkers and feeders. Keep the soil evenly moist during hot spells to avoid bitter fruit and side-dress plants with ¼ cup of 10-10-10 fertilizer or the equivalent in mid-July.
- 6. Check <u>brassicas</u> for cabbageworm, diamond-back moth caterpillars, cross-striped caterpillars, and cabbage loopers. Use row covers or <u>Bacillus thuringiensis</u> to control them.
- 7. Put netting on fruit trees and bushes a few weeks before the fruit begins to ripen to protect it from birds and squirrels.
- 8. If grubs were a problem in previous years, apply <u>grub control</u> no later than July 15th so that it is systemically in place in grass roots when the grubs hatch in early August.
- 9. Raise your mowing height to 3 inches during hot weather and mulch clippings if possible.
- 10. Fertilize roses for the last time in mid-July.



Parasitized tomato horn worm. Photo by dmp2015.

Read more July Garden Tips Here

Food for Thought

Connecticut has almost 100 Farmers Markets. Visit some this summer to pick up fresh, local grown produce and more. <u>https://portal.ct.gov/DOAG/ADaRC/Publications/Farmers-Markets</u>

New! Farm Fresh Food Guide for Northeastern Connecticut <u>https://www.grownconnected.org/</u>

Maybe it's time to break up with plastic

Despite its functionality, plastic could be posing a threat not only to the environment but to human health.

Healthy Environment

Managing nitrogen applications on lawns to prevent pollution. <u>https://soilsmatter.wordpress.com/2022/06/15/how-can-i-manage-my-lawn-to-prevent-nitrate-pollution/</u>

Who Knew?

Microplastics can affect seed germination and development. A science-based article, but since there are microplastics in our air, water and soil, it is important to study how they would affect plant growth. <u>https://www.sciencedirect.com/science/article/pii/S0045653522016551</u>

Identifying bird species by sound, an app opens new avenues for citizen science

The BirdNET app, a free machine-learning powered tool that can identify over 3,000 birds by sound alone, generates reliable scientific data and makes it easier for people to contribute citizen-science data on birds by simply recording sounds.

Click on the Following Links to Visit Any of Our Sites:

UConn Extension

UConn Food Safety

UConn Home & Garden Education Center

UConn Plant Diagnostic Laboratory

UConn Soil Nutrient Analysis Laboratory

UConn Master Gardener Program

UConn Garden Master Classes - All open to the public